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February 8, 2002

Mr. David Albright
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, California 94105

Re: TIMET Emission Reduction Credits

Dear Mr. Albright:

Titanium Metals Corporation (TIMET) has applied to the Clark County Health District for Section 58 Emission Reduction Credits (ERCs) for proposed changes at its Henderson, Nevada facility. We understand that Al Lesky's has provided you with his analysis of the Application. While we concur with most of Districts analysis, we believe the District has undercounted some of the carbon monoxide ERCS, that should be approved. This letter provides background on TIMET's Application for Section 58 ERCs and the basis for supporting the issuance of the ERCs requested in our Application (attached).

BACKGROUND

TIMET has been approached by a number of energy providers to locate a Combined Heat and Power plant on the TIMET facility. The energy providers are interested in building a power plant on the TIMET site because TIMET has generated significant ERCs, and has the capacity to provide ample water for operation of the power plant through installation of cooling towers. The Clark County Health District Regulations prohibit the construction of a new facility within the County absent ERCs.

Locating a Combined Heat and Power plant on the TIMET site would have significant energy cost savings and environmental benefits for TIMET.[1] A component of the building of a power plant would be the purchase and installation of the cooling towers that would enable TIMET to recycle over two million gallons of water per day, and to eliminate discharges currently permitted in the facility's NPDES permit. Further, TIMET has permitted, through the Nevada Division of Environmental Protection, a Zero Discharge Project that would allow TIMET to eliminate the current practice of disposal of liquid wastes in ponds. The Zero Discharge Project would convert the existing liquid waste stream into calcium chloride, suitable for use as a dust suppressant.

[1]As noted in the Draft October 15, 2001 John S. Seitz, Memorandum, Combined Heat and Power facilities provide significant environmental and energy efficiencies in and of themselves.

The Zero Discharge Project has been halted because of lack of funding, and we believe energy savings associated with the Combined Heat and Power plant would enable TIMET to proceed with the project.

The Application for ERCs identifies two opportunities for generating the ERCs at TIMET. The following discussion provides additional information not apparent in the TIMET's Application for ERCs and the District's evaluation of the Application:

I. The Kroll Reduction Process

The TIMET facility in Henderson, Nevada has produced titanium metal since 1956. The facility is comprised of three distinct chemical plants within the facility. Unrefined titanium dioxide is created in the chlorination and purification process. Prior to 1993, impurities in the unrefined titanium were removed in the Kroll Reduction and Leaching Process (Kroll Process). In 1993, TIMET installed the Vacuum Distillation Process (VDP). With the advent of VDP, TIMET reduced the use of the Kroll Process, and significantly reduced air emissions and liquid and solid wastes. However, the Kroll Process has historically operated during times of normal production to make low nickel titanium.

As the District analysis of the application shows, criteria pollutant emissions from the Kroll process are significant. Equally important, eliminating the Kroll Process will permanently reduce HNO_3 emissions by 40 tpy, HCL emissions by 22 tpy and eliminate numerous liquid waste streams that are disposed of in ponds after elementary neutralization.

The titanium metal industry is extremely cyclical, and is tied directly to the aerospace industry. In 1999, TIMET alerted the Clark County Health District and EPA Region 9, that it was idling the Kroll Process until economic conditions warrant a restart of the Kroll Process. During the interim period, TIMET has developed, on a bench scale basis, the ability to transfer low nickel operations into VDP. In early 2000, TIMET initiated the process of obtaining ERCs for permanently shutting down the Kroll Process and transferring low nickel operations into VDP. However, TIMET cannot replace the Kroll process without selling the ERCs to generate the capital to modify VDP.

The ERCs requested in the Application satisfy all of the requirements set forth in Section 58: the emission reductions are real, permanent, quantifiable and would be federally enforceable. We therefore respectfully request that EPA approve the ERCs sought from the permanent shut down of the Kroll process and endorsed by the District.

II. The Chlorination Process

In the chlorination unit, titanium dioxide is reacted with petroleum coke and chlorine to produce titanium tetrachloride. A large amount of carbon monoxide is emitted during the chlorination process. Carbon monoxide emissions are controlled through the use of LAER: a thermal oxidizer. In 1998, Region 9 EPA brought suit against TIMET for an alleged failure to comply with the PSD program.

On February 24, 2000, the U.S. District Court approved a Consent Decree between Region 9 EPA and TIMET, resolving issues regarding carbon monoxide emissions from the chlorination unit. The Consent Decree states that the annual CO limits of 1,632.6 tons per year remains in effect (paragraph 15 B). Further, the Consent Decree also recognizes that operating capacity is the equivalent of 48 reductions per day (paragraph 15 F.) The Consent Decree is absolutely clear that the Chlorination Unit is permitted to full capacity, including operating in a bypass mode during periods that are not scheduled maintenance.

TIMET is, in essence, seeking a federally enforceable CAP on CO emissions that would generate the ERCs necessary to enable the facility to raise the capital necessary to transfer low nickel operations to VDP. TIMET has proposed to cap CO emissions at 350 tons per year, thereby generating 393 tons per year of ERCs, utilizing the 1997 and 1998 average emissions. The viability of locating a Combined Heat and Power plant at the facility is driven in large part by the ability of power producers to obtain CO ERCs.

In its analysis of the ERC Application, the District has identified two methods of calculating allowable CO ERCs for TIMET: utilizing the years that are representative of "normal source operations" (40 CFR Part 51, Appendix S) or the past two years of actual operation. TIMET believes the use of 1997 and 1998 average emissions is the appropriate baseline. EPA policy clearly allows for use of years that are representative of actual operating conditions, and the Agency is not limited to utilizing only the most recent two years.

Considering that the Consent Decree was approved less than two years ago, we think it more reasonable that EPA utilize the average CO emissions for 1997 and 1998. This approach is consistent with EPA regulations and the provisions of Section 58. Additionally, utilizing the emissions that represent normal source operations will enable TIMET to proceed with the ambitious multi-media emission reduction program it has initiated.

We would be more than pleased to meet with you at your office to provide additional information on the proposed plans for TIMET as well as to provide data that the years 1997 and 1998 are representative of normal source operations.

Sincerely,

Joshua B. Epel
for Gablehouse & Epel, LLC

cc: Craig Wilkinson, HSEA Manager
Al Lesky
George Wyeth

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March 14, 2002

Mr. David Albright
U.S. EPA, Region 9
75 Hawthorne Street
San Francisco, California 94105

Re: Response to Information Request: TIMET Application for Emission Reduction Credits

Dear Mr. Albright:

On February 28, 2002, Craig Wilkinson and I met with Al Lesky's and Michael Sword to discuss the issues you identified regarding TIMET's ERC Application. Both you and Al Leskys identified three areas of clarification that you need to make a determination on the Application for ERCs. I am enclosing documentation provided to Al and Mike intended to address your concerns.

I. Demonstrating that CO Emissions from 1997 and 1998 are Representative of "Normal Source Operations".

As we discussed in our February 8, 2002 letter, the titanium metals industry is extremely cyclical. Attachment 1 contains information provided on July 18, 2001 to the Department of Air Quality Management (DAQM) in response to the issue of normal source operations. Attachment 1 demonstrates that the coke consumption and CO in 1997 and 1998 emissions are significantly greater than the last two years of production.

Region 9 EPA has already explicitly addressed the issue of normal source operations in the Consent Decree, approved by the U.S. District Court on February 24, 2000. The emission limits in the Consent Decree were designed to allow Timet to produce titanium metal at maximum production. Production in 1997 and 1998 are close to full production, while the most recent two years of production are only 60% of capacity.

II. The Use of the Thermal Oxidizer is not the Basis for Timet's Ability to Reduce CO Emissions

A second issue raised by the DAQM and EPA is that TIMET may be achieving lower emissions by relying on the thermal oxidizer to reduce emissions. Timet has acknowledged in writing to DAQM that emission reductions attributable to the thermal oxidizer would not be "surplus" because they were required in the Consent Decree, and therefore cannot be relied upon in the Application for ERCs.

Attachment 2 summarizes the use of the thermal oxidizer during the first year of operation. Please note that during the first year of operation, the thermal oxidizer operated for 486 hours, and controlled 79 tons of CO. Obviously, the use of the termal oxidizer is not the basis for Timet's confidence that it can implement improvements to significantly reduce CO emissions that will be real, surplus, permanent, quantifiable and, with your approval, federally enforceable.

III. Achieving the 350 TPY CAP on CO Emissions Will Be Achieved by Process Improvements Proposed by Timet.

On July 18, 2001, Timet provided DAQM with a description of the process improvements it is in the process of investigating and developing to reduce CO emissions. The process improvements are key to achieving the proposed 350 tpy CAP on CO emissions at full production. Attachment 3 contains a rudimentary description of the proposed changes.[1]

Each of the proposed process improvements is designed to enhance the efficiency of operations at Timet. The coke consumption project will control petroleum coke and air inputs into the chlorination process, resulting in more efficient TiCL production, and reducing CO emissions by an estimated twenty percent, or 260 tons per year at maximum production.

The burner management system proposal will modernize the CO burner and allow the burner temperature to be raised from an average of 1450^0 to 1750^0 F, as well as automating the current manual damper controls. This improvement should allow for the destruction efficiency to improve significantly above the existing 90% DRE.

All of the proposed improvements are voluntary, real and permanent. Because Timet utilizes a CEM, the improvements would be quantifiable and federally enforceable.

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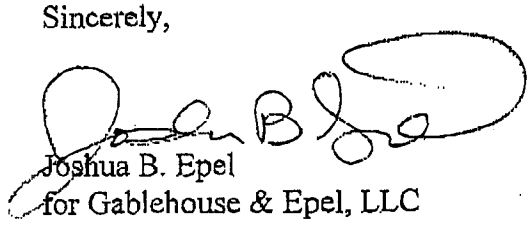
[1] Given the complexity of the chlorination process, a detailed description of each of the proposed changes would be significant. Timet will be pleased to meet with you to discuss each of the proposed enhancements.

During our meeting with DAQM, Timet expressed its concern that the Agency has failed to make a completeness determination on the Application. Timet has submitted two Applications; on January 24, 2001 and May 18, 2001. Timet respectfully requests that Region 9 evaluate the ERC application and approve the ERCs as set forth in the Application and our correspondences to you. An affirmative determination that, consistent with the Consent Decree, 1997 and 1998 production and CO emissions are representative of normal operations would facilitate the ERC approval process. Preapproval of the ERC Application will allow Timet to undertake the significant environmental improvements set forth in our correspondences with you.

Timet will be pleased to meet with Region 9 EPA as soon as possible to provide detailed explanations of the chlorination process and the proposed process improvements.

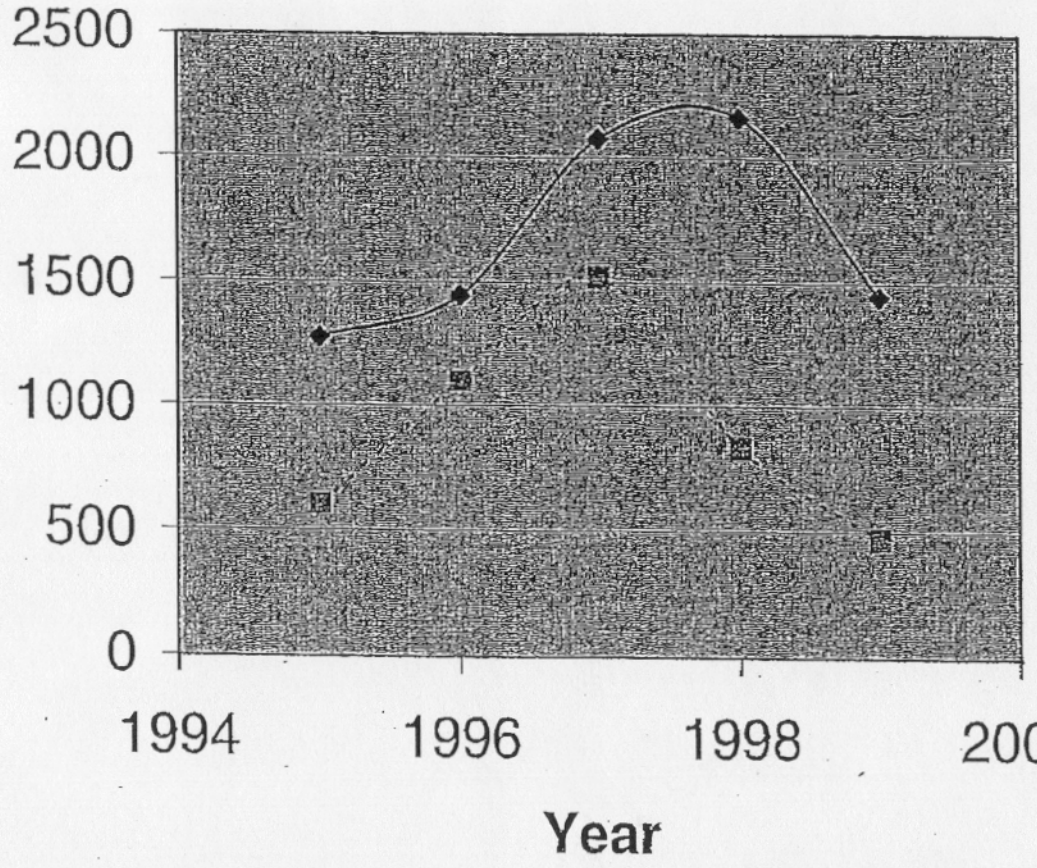
Sincerely,



Joshua B. Epel
for Gablehouse & Epel, LLC

cc: Craig Wilkinson, HSEA Manager
Al Leskys
George Wyeth

Coke Consumption vs. CO Emissions



Year	TiCl4 Produced (lbs.)	Total Emissions (tons)
1996	80,567,002	1101
1997	110,295,812	1523
1998	112,340,984	857
1999	63,960,674	471

Thermal Oxidizer

* The Thermal Oxidizer was listed in Consent Decree Report #6 as being ready for use on 11-1-2000.

Consent Decree Report	Date(s)	T.O. Operation (hours)	CO Emissions (tons)
# 8	2/1/01 thru 3/31/01	241.50	1.96
# 9	4/1/01 thru 5/31/01	11.50	18.36
# 10	6/1/01 thru 7/31/01	94.00	34.02
# 11	8/1/01 thru 9/30/01	101.75	14.32
# 12	10/101 thru 11/30/01	6.00	4.68
# 13	12/1/01 thru 1/24/02	31.00	5.37

February 28, 2002

ADQ MEETING ON ERC

Request #4: Please provide more detail as to the specifics of the process improvements to the Chlorination process.

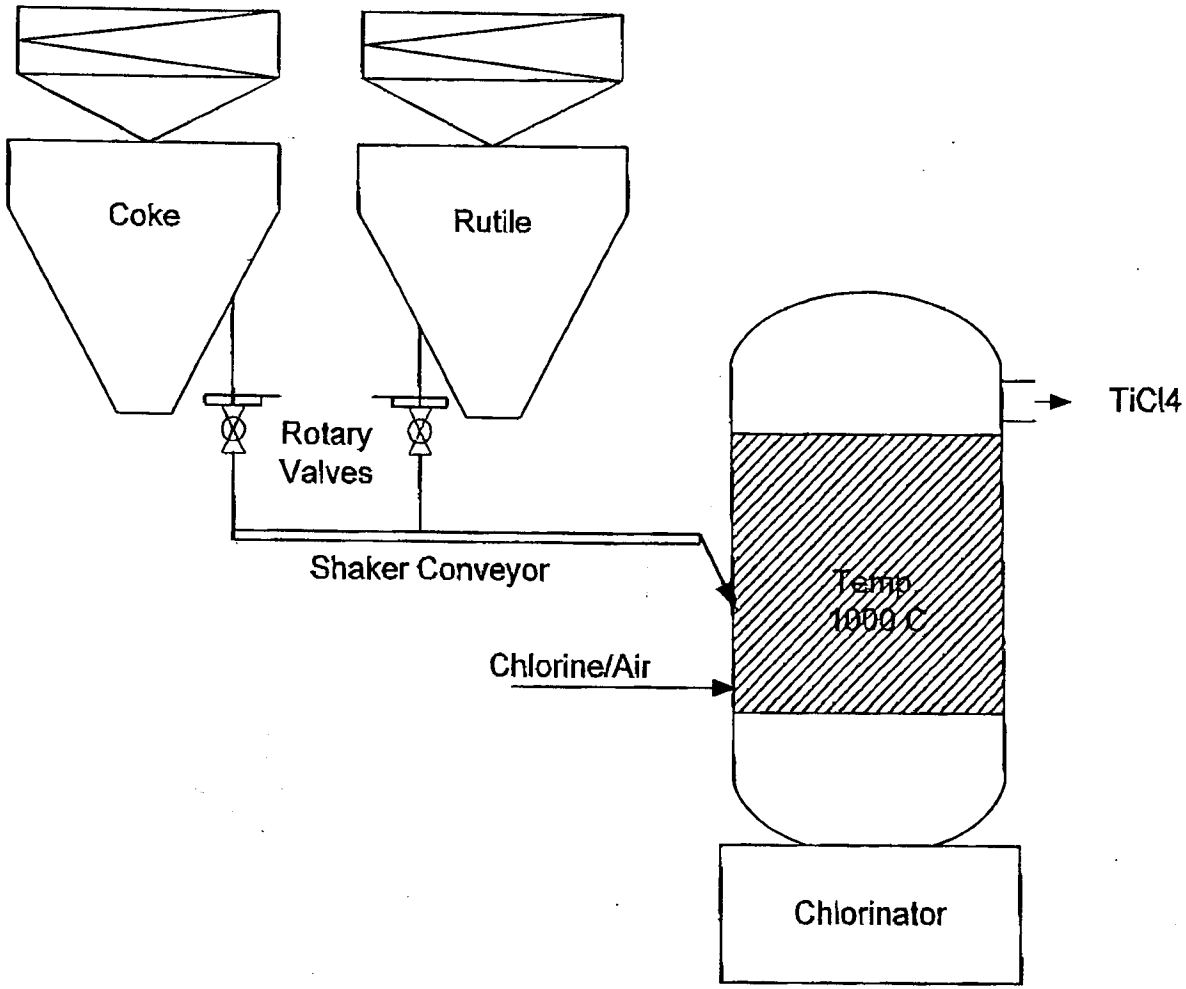
- COKE CONSUMPTION (Proposal) – Identified process improvements including utilization of star valves for coke consumption. Calibrate pounds of coke per revolution of star valves and eliminate air leaks from the coke bins. Better control of coke consumption and airflow. Preliminary estimate of 20% reduction of CO or 260 tons at 1996 and 1997 average. Approximate cost $250,000

- FLOW CONTROLS (Proposal) – Install flow controls for air and chlorine gas with remotes located in Chlorinating Control Room. This will allow immediate and efficient management of air and chlorine control, which will optimize coke combustion. Approximate cost $300,000

- BURNER MANAGEMENT SYSTEM (Proposal) –Upgrade the CO Burner. This will allow TIMET to increase the CO Burner temperature from 1450° to 1750°. Approximate cost $200,000

- PURCHASE $TiCl_4$ (Proposal) – Purchase $TiCl_4$ to ensure efficiency of Chlorinators. Approximate cost $480,000

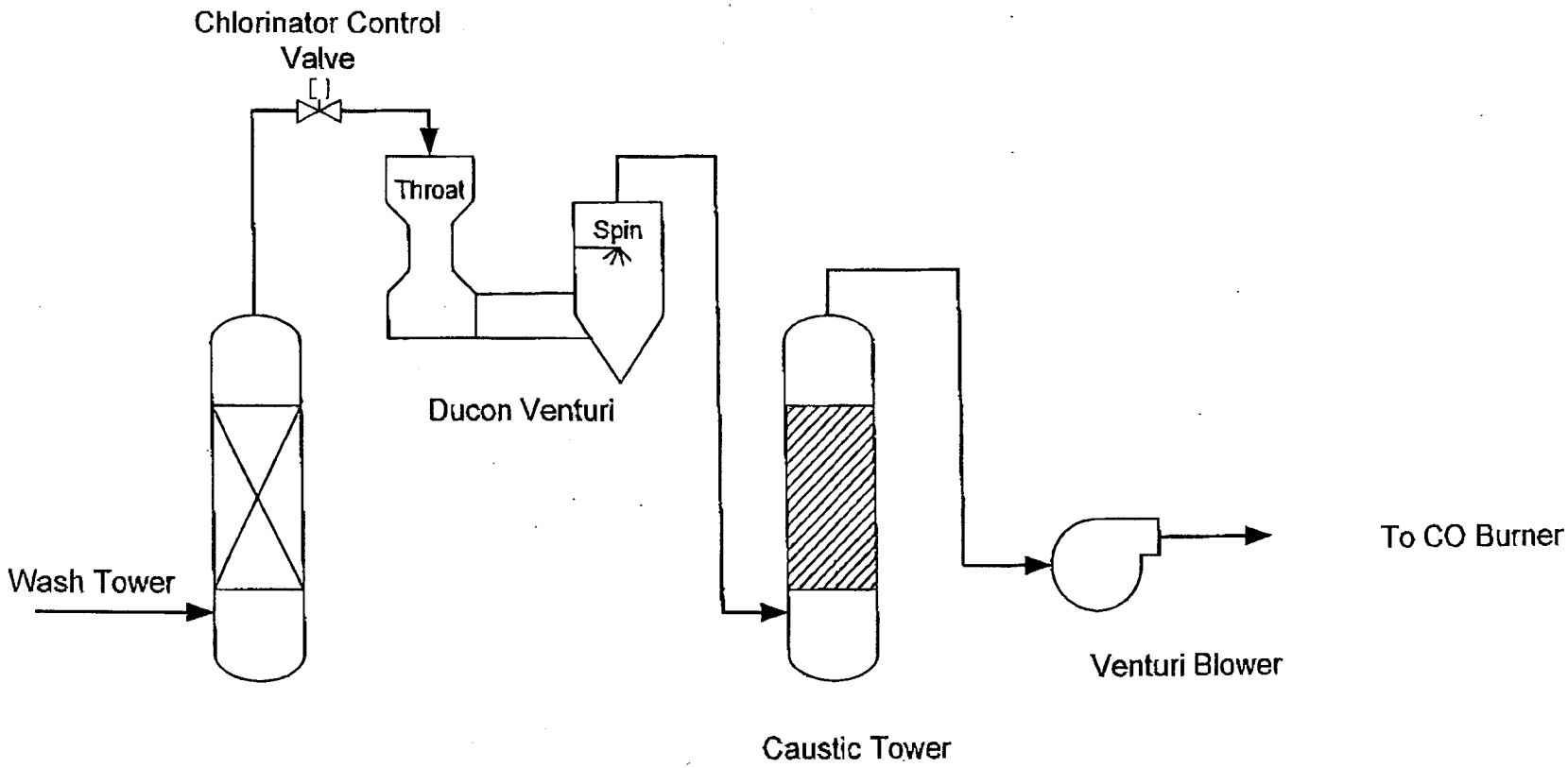
- VENTURI SCRUBBING SYSTEM (Proposal) - Improving the off-gas system Approximate cost $1,500,000



TIMET
Henderson, NV

Chlorination Rotary Valves Block Flow Diagram

INITIAL	CHANGES	FILE NAME
Drawn By JJC	Drawn By	
Date 14 Dec. 2001	Date	SOFTWARE Visio Prof 5.0a



TIMET®
Henderson, NV

Chlorination Venturi Process Flow Diagram

INITIAL	CHANGES	FILE NAME
Drawn By JJC	Drawn By	
Date 28 Feb. 2002	Date	SOFTWARE Visio Prof 5.0a